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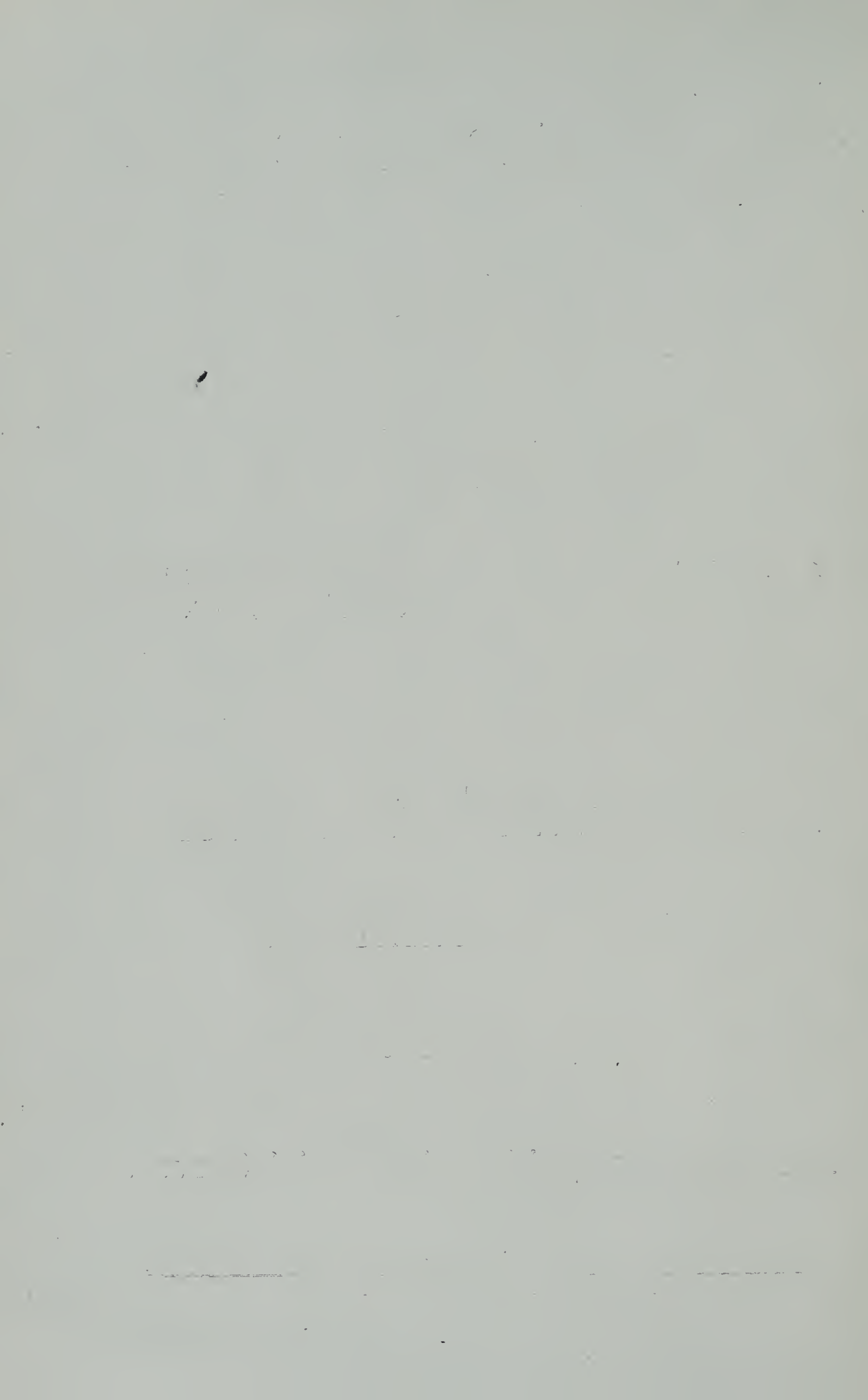


ANNUAL REPORT

OF THE

County Medical Officer
of Health.

The Year 1925, with Quinquennial Survey.



Westmorland County Council.



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Atkinson & Pollitt, Printers, Kendal.

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County of Westmorland.

Public Health and Housing Committee of the County Council.

Chairman: MR. F. W. CREWDSON.

Vice-Chairman: MR. J. W. CROPPER.

LORD HENRY BENTINCK.

SIR J. W. WESTON, BART.

W. D. CREWDSON,

J. CROSBY,

R. W. DENT,

T. E. ETHELLES,

H. L. GROVES,

T. D. HANDLEY,

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R. W. HAYES,

REV. W. KING,

R. W. LAMBERT,

G. F. MARTINDALE,

H. M. MOFFAT,

H. MOSER,

J. PARKIN,

G. H. PATTINSON,

G. N. PATTINSON,

D. J. PENNINGTON,

H. A. T. SHEPHERD,

W. STALKER,

ED. THOMPSON,

W. H. WALLACE.

District Medical Officer of Health.

<i>Name.</i>			<i>Urban District.</i>
W. BARON COCKILL, M.D., D.P.H.		...	AMBLESIDE.
"	"	"	APPLEBY.
"	"	"	GRASMERE.
"	"	"	KENDAL.
"	"	"	KIRKBY LONSDALE
"	"	"	SHAP.
"	"	"	WINDERMERE.
			<i>Rural District.</i>
"	"	"	EAST
			WESTMORLAND
"	"	"	SOUTH
			WESTMORLAND.
"	"	"	WEST WARD.

COUNTY HEALTH REPORT.

To the Chairman and Members of the Public Health and Housing Committee of the County of Westmorland.

Gentlemen,

I have the honour to present my Report for the year 1925 on the Health of the County.

Acting on instructions from the Ministry of Health the present report takes the form of a survey of the years 1921 to 1925.

In Circular 648 of date 10th December, 1925, the Ministry ask that the Report shall deal comprehensively with :

- (a) The measure of progress made in the area during the preceding five years in the improvement of the public health ;
- (b) The extent and character of the changes made during that period in the public health services of the area (e.g., housing, water supply, sewerage, scavenging or refuse disposal, food inspection, or other services affecting the environment of the inhabitants; and maternity and child welfare schemes, schemes for the treatment of tuberculosis and venereal diseases, provision of isolation hospitals, or other service directed to the prevention or cure of disease in individuals);
- (c) Any further action of importance in the organisation or development of public health services contemplated by the Local Authority or considered desirable by the Medical Officer of Health.

The present Report has been framed to meet the above requirements in so far as they concern the public health duties discharged by County Councils. I am deeply indebted to Dr. Cockill, the Medical Officer of Health of the Westmorland Combined Districts, for information freely supplied in regard to the work of the Local Sanitary Authorities, and for his willing co-operation at all times.

I have the honour to be,

Your obedient Servant,

WILLIAM ELMSLIE HENDERSON.

Natural and Social Conditions of the Area.

ADMINISTRATIVE COUNTY OF WESTMORLAND.

AREA.

The Administrative County of Westmorland has an area of 504,917 statute acres (land and inland water), of which 31,572 are Urban and 473,345 Rural. There are 7 Urban and 3 Rural districts, with a population, as estimated for 1925 by the Registrar-General, of 62,440; there are 8 acres to each inhabitant. There are only three counties in England and Wales with a less density of population, namely, Merionethshire, Montgomeryshire, and Radnorshire.

BOUNDARIES.

Westmorland marches with Cumberland on the N.-W., Lancashire on the S. and S.-W., Yorkshire on the E., and a small portion of Durham on the extreme N.-E. Its length from N.-E. to S.-W. is 42 miles, while from E. to W. it measures 40 miles. The Pennine Range forms its eastern frontier, while the principle chain of the Lake District mountains forms its north-western barrier from Helvellyn to Bowfell. Windermere Lake, Grasmere Lake, Rydal Water, Haweswater, etc., are wholly within the County, which also includes part of Ullswater.

THE FACE OF WESTMORLAND.

Within these boundaries are scenes of great and varied beauty, here tender and pastoral, there wild and lonely. Eastward lies the fertile valley watered by the River Eden, full of the history and romance which gather round Appleby, the ancient capital town of the County. Between this valley and the southern and more populated portion of the County are the rolling moorlands of Shap. To the south is the busy town of Kendal in its beautiful setting among the hills. To the west are the lakes, the dales and the mountains, "beloved of dawn and of sunset."

Upon the Main Roads Committee devolves a great and costly responsibility in maintaining in sound condition the approaches to all this loveliness. If there is heavy traffic, if countless workers from the cities flock here in charabancs, this costly upkeep of roads is the penalty of having to administer a County so fair to look upon.

OCCUPATIONS.

In the following table the main occupations pursued by the male population, as revealed by the census reports, are set out:—

Total males occupied and unoccupied	...	24,310
Retired or unoccupied	... ..	4,263
Engaged in occupation	... ..	20,047
Agriculture	... ..	6,170
Building and Works of Construction	...	2,071
Food, Tobacco, Drink and Lodging...	...	1,309
Domestic Outdoor Service	... ..	997
On Railways	... ..	915
General Laborers	... ..	816
Professional Occupations	... ..	685
On Roads	... ..	647
General Engineering	... ..	590
Boot, Shoe, Patten, Clogmakers	... ..	523
Mines and Quarries	... ..	502
General or Local Government	... ..	383
Merchants, Agents, Banking	... ..	339
Textile Manufacturers	... ..	315
Others in Paper, Prints, Books	... ..	269
Chemicals, Explosives	... ..	235

General Statistics.

Area (acres)	.....	504,917
Population (Census, 1921)	.....	65,746
Population (estimated 1925)	.....	62,440
Number of Inhabited Houses (1921)	.....	14,460
Number of Families or Separate Occupiers (1921)	.....	14,648
Rateable Value (1925)	....	£462,903
Assessable Value (1925)	.....	£537,997
Sum represented by a Penny Rate	.....	£1,938 19 2

Summary of Vital Statistics for the Years 1921—1925.

	1921	1922	1923	1924	1925	England & Wales.
*Birth Rate	19.01	18.3	17.6	16.98	15.84	18.3
†Infantile Mortality						
Rate	73	58	60	67.6	46	75
*Nett Death Rate	12.8	13.1	12.3	14.76	13.68	12.2
*Phthisis Death Rate..	0.56	0.59	0.39	0.59	0.67	

*Per 1,000 population.

†Per 1,000 births.

ESTIMATED POPULATION FOR 1925.

The population for the Year 1925, as estimated by the Registrar-General, will be found in the following Table :—

DISTRICT.		Area in Acres: (Land and Inland Water).	Population. Registrar General's estimate for 1925.
URBAN.			
Ambleside	...	4,425	2,272
Appleby ..	...	1,877	1,627
Grasmere		7,333	879
Kendal ...	...	2,700	14,290
Kirkby Lonsdale		3,254	1,261
Shap ...	...	2,081	1000
Windermere	...	9,902	5,311
RURAL.			
East Westmorland		183,771	11,000
South Westmorland		169,702	18,750
West Ward	...	119,872	6,050
Totals ...		504,917	62,410

Birth Rate, 1921-25.

BIRTH RATE PER 1,000 POPULATION.

DISTRICT.	No. of Births 1925.	Birth Rate 1925	Birth Rate, 1924.	Birth Rate, 1923.	Birth Rate, 1922.	Birth Rate 1921
Urban.						
Ambleside	34	14.96	12.33	11.04	18.8	12.1
Appleby	19	11.67	14.66	17.5	15.1	17.4
Grasmere	10	11.37	16.1	18.02	19.6	7.03
Kendal	238	16.65	19.47	17.4	18.5	22.1
Kirkby Lonsdale	17	13.48	14.57	18.1	14.7	14.6
Shap	21	21.0	22.02	26.0	28.1	30.2
Windermere	55	10.35	14.19	12.3	12.8	13.6
Rural.						
East Westmorland	210	19.09	20.27	21.5	21.5	21.4
South Westmorland	286	15.25	14.72	17.1	16.9	17.5
West Ward	96	15.85	16.91	18.1	19.8	21.4
Westmorland	986	15.84	16.91	17.6	18.2	19.01
England and Wales	—	18.3	18.8	19.7	20.6	22.4

The births registered in the above 5 years were as follows :

Year	...	1921.	1922.	1923.	1924.	1925.
No. of Births	..	1,180	1,129	1,098	1,060	986

It will be observed that there has been a progressive fall in the County Birth-Rate and that in 1925, with the exception of Shap and East Westmorland, the rate in all the Districts is below that of England and Wales.

Death Rates, 1921—1925.

NET DEATH RATES PER 1000 POPULATION.

District:	No. of of Deaths 1925.	Death Rate in 1925.	Death Rate in 1924.	Death Rate 1923.	De ath Rate, 1922.	Death Rate 1921.
Urban.						
Ambleside	22	9.68	12.77	12.3	13.5	13.0
Appleby	33	20.28	15.88	15.1	6.6	10.8
Grasmere	11	12.51	8.0	11.4	9.2	4.6
Kendal	225	15.74	15.39	13.0	15.7	14.2
Kirkby Lonsdale	13	10.3	14.57	14.9	8.8	13.9
Shap	23	23.0	20.92	9.0	17.1	18.1
Windermere	67	12.61	13.63	10.0	14.5	10.9
Rural.						
East Westmorland	140	12.72	16.53	13.3	12.5	14.4
South Westmorland	204	10.80	14.5	12.5	11.7	11.2
West Ward	85	14.04	12.48	10.2	12.4	13.1
Westmorland	823	13.18	14.76	12.3	13.1	12.7
England & Wales	—	12.2	12.2	11.6	12.9	12.1

An analysis of the causes of deaths in the various districts in 1925, reveals the fact that the diseases in order of fatality were as follows :—

Disease.	No. Deaths, 1925.	Average 1: 21—1925.
Heart Disease	134	138
Cancer	106	97
Cerebral Haemorrhage	66	72
Bronchitis	57	45
Tuberculosis of Respiratory System	42	37
Pneumonia	34	38
Arterio-Sclerosis....	31	29
Influenza	28	29

Infantile Mortality, 1921-25.

DEATHS OF INFANTS UNDER ONE YEAR PER 1,000 BIRTHS.

DISTRICT.	No. of Births in 1925.	No. of Deaths in 1925.	Infant Mortality Rate in 1925.	Infant Mortality Rate in 1924.	Infant Mortality Rate in 1923.	Infant Mortality Rate in 1922.	Infant Mortality Rate in 1921.
Urban.							
Ambleside	34	1	29	0	77.0	46	0
Appleby	19	0	0	41.6	0	0	0
Grasmere	10	0	0	71.4	0	59	0
Kendal	238	18	76	104.6	84.6	83	85
Kirkby Lonsdale	17	1	66	52.6	83.3	100	150
Shap	21	2	95	0	38.4	107	100
Windermere	55	1	19	53.3	30.7	45	98
Rural.							
E. Westmorland	210	9	43	81.0	55.5	30	57
S. Westmorland....	286	11	40	54.3	62.5	60	70
West Ward	96	3	34	29.1	45.4	58	77
Westmorland	986	46	46.6	67.9	60.1	58	73
England & Wales	—	—	75	75.	69.0	77	83

The Infantile Mortality rate for 1925 of 46.6 is the lowest so far recorded for Westmorland. It is considerably below the rate for England and Wales. The average rate for the 5 years (1921-1925) for Westmorland is 61.6.

Age Incidence of Infantile Mortality, 1925.

DISTRICT.	1 week.	1-2 weeks.	2-3 weeks.	3-4 weeks.	Under 1 month.	1-3 months	3-6 months	6-9 months	9-12 months	Total under 1 year.
URBAN.										
Ambleside	—	—	—	—	—	1	—	—	—	1
Appleby	—	—	—	—	—	—	—	—	—	—
Grasmere	—	—	—	—	—	—	—	—	—	—
Kendal	4	—	1	3	8	2	4	3	1	18
Kirkby Lonsdale	—	—	—	—	—	—	—	1	—	1
Sha	—	—	—	—	—	—	—	1	1	2
Windermere	1	—	—	—	1	—	—	—	—	1
RURAL										
E. Westmorland	2	—	2	—	4	2	1	2	—	9
S. Westmorland	3	3	—	1	7	2	—	2	—	11
West Ward	2	—	—	—	2	1	—	—	—	3
Westmorland	12	3	3	4	22	8	5	9	2	46

Analysis of Causes of Deaths of Infants under one year in 1925.

DISTRICT.	Gastritis.	Convulsions	Bronchitis	Pneumonia	Injury at Birth.	Prematurity	Atrophy, Debility and Marasmus	Congenital Malformation	Other Causes	TOTAL	Deaths in order of Fatality.
URBAN.											
Ambleside	—	—	—	—	—	—	—	—	1	1	
Appleby ...	—	—	—	—	—	—	—	—	—	—	
Grasmere	—	—	—	—	—	—	—	—	—	—	
Kendal ...	2	1	4	1	—	4	2	1	3	18	Prematurity .. } Other Causes .. } 11
Kirkby Lonsdale	—	—	—	—	—	—	1	—	—	1	Marasmus .. } Bronchitis .. } 5
Shap ...	—	2	—	—	—	—	—	—	—	2	
Windermere	—	—	—	—	1	—	—	—	—	1	Congenital Malformation 4
											Convulsions .. } Gastritis .. } 3
RURAL.											
E. Westmorland	1	—	—	1	—	3	—	1	3	9	Injury at Birth . . } 1
S. Westmorland	—	—	1	1	—	3	2	—	4	11	
West Ward	—	—	—	—	—	1	—	2	—	3	
Westmorland	3	3	5	3	1	11	5	4	11	46	

MATERNITY AND CHILD WELFARE.

Dr. Dorothy Potts, the Assistant County Medical Officer of Health, supervises this important element in the County Health Scheme. She also acts as Inspector of Midwives. The nurses employed by 27 Nursing Associations acted as Infant Welfare Visitors, School Nurses, and Tuberculosis After-care Visitors. They also rendered valued service at the routine medical inspection of the school children, and at the Dental and Orthopædic Clinics. For these part-time services the County Council makes substantial annual payments to the Nursing Associations. Now is the time to record our thanks to the nurses for their invaluable help and deep interest in this work, and not alone do the nurses claim our gratitude, the members of the various Nursing Associations, especially the Honorary Secretaries, have devoted much time, thought and care to the problem of maintaining a trained nurse in areas many of which are widely scattered and inhabited by families from which a large revenue is not procurable. To keep their flag flying year in year out calls for much effort and mutual self-sacrifice.

Isolated farms and cottages beyond the high-water mark of the nursed areas have been visited by Dr. Potts wherever there was a mother with small children, to be encouraged by a homely and very practical chat on child nurture.

Home visiting by the nurses or by Dr. Potts is the main activity. During 1925 efforts were made to extend the pre-natal supervision of the mothers in view of this County's high incidence of maternal mortality. In spite of the fact that 74 fewer babies were born in 1925 than in 1924, there has been an increase in the number of visits paid to expectant mothers.

There are few communities large enough to call for Welfare Centres. However, there are centres held once a month at Windermere, at Bowness-on-Windermere and at Ambleside, at all of which Dr. Potts attends.

The warmest thanks of your Committee are due to the voluntary workers at these centres with their active and practical sense of citizenship.

The figures which follow simply chronicle the surface extension of the work. It takes a reader who knows Westmorland and who has the gift of sympathetic imagination to read into them their true meaning. Some of these figures represent this kind of thing.

It is 2 a.m. in mid-winter, and a blizzard is blowing the snow into drifts which no motor car can tackle. On such a night a district nurse was summoned to a confinement over four miles distant in a remote mountain valley. Bicycle or motor car being out of the question, an attempt was made on horseback. This, too, was found impossible. The nurse fought her way down to a farmhouse by the lake-side, stabled the horse, and, launching a boat, rowed three miles in pitch dark along the shore of the lake to a point where she could land and reach her patient on foot. She arrived in time to conduct the confinement, and all went well with the mother and infant. In wide and hilly districts the question of transport for the nurse is a real difficulty. Some Associations have solved it by providing a motor car (Burneside, and Hutton-Natland); others have secured motor bicycles (Staveley, Levens, Milnthorpe, Preston Patrick, Clifton and Lowther, and Kirkby Thore).

There are in addition to these at least eight Nursing Districts where the provision of motor-bicycles is indicated. Your Committee is considering how best to encourage these eight Associations to secure suitable transport for their nurses.

The figures as to visits by nurses are as follows:—

	By Nurses.	By Dr. Potts.	Total.
Expectant Mothers Visited ...	420	5	425
Total Visits ...	1,465	12	1,477
Infants Visited ...	654	114	768
Total Visits ...	5,871	549	6,420
Children 1—5 years, total			
Visits ...	2,650	359	3,009

Under the Borough of Kendal Maternity and Child Welfare Scheme, a Maternity and Child Welfare Centre is held one afternoon per week. It is conducted by the Medical Officer of Health of Kendal.

The following summary indicates the ground covered:—

KENDAL CENTRE, 1925.

Number of Times Centre has been Open	...	52
„ „ Babies under 1 year attending	...	97
„ „ Children 1—5 years attending	...	101
„ „ Consultations for Children	...	1208
„ „ „ „ Mothers	...	200
Average Number of Children Attending per Session	...	22.8
„ „ Mothers attending per Session	...	3.8
„ „ Expectant Mothers attending per Session	...	2.1

The Kendal Health Visitor made the following home visits:—

Total Visits to Expectant Mothers	...	82
Infants Visited	...	216
Total Visits	...	1024
Children, 1—5 years, total visits	...	291

With regard to children of school age, the nurses in the Administrative County paid 3,395 visits to the homes, and 3,307 visits to the schools, in connection with children found defective at school medical inspection.

1,855 children had dental treatment, 4,234 had dental inspection, 477 children had their eyes tested by refraction, and 3,989 had medical inspection.

Twenty-eight children (two under school age) were in residence at the Ethel Hedley Orthopædic Hospital, Calgarth Park, Windermere in 1925. In addition 94 children have been under continued observation at the Orthopædic After-care Clinics at Kendal, Kirkby Lonsdale, Penrith, and at the Ethel Hedley Hospital. The work accomplished by our County Scheme for Cripples has been referred to in detail in my report as School Medical Officer. With the Ethel Hedley Hospital as base all is now in train for the early ascertainment of crippling diseases, for treatment at the earliest possible moment, so as to prevent, as well as to remedy deformities, for continuity of supervision and instruction in remedial exercises at the after-care clinics, and for the restoration of the cripple to normal life as an ultimate wage-earner.

MATERNITY.

In 1925, two deaths occurred from puerperal sepsis and four deaths from other accidents and diseases of pregnancy and parturition, viz., two from eclampsia and two from haemorrhage. The two fatal cases of puerperal sepsis were complicated, the one by placenta prævia, and the other by dental abscesses. The dental treatment of expectant mothers, which the County Dental Surgeon is organising, with the approval of your Committee, should prevent such a calamity in the future.

The figures for the years 1921—1925 as to maternal deaths are as follows :—

Year		No. of Births.		Deaths from Sepsis.		From other causes.
1921	...	1180	...	1	...	5
1922	...	1129	...	0	...	8
1923	...	1098	...	0	...	3
1924	...	1060	...	1	...	4
1925	...	986	...	2	...	4
Total		5453	...	4	...	24

Taking the above 5 year period our Maternal mortality rate per 1,000 births is for Sepsis .73 (below the average for England and Wales), and for other causes 4.4 (much above the average for England and Wales).

It has been the constant and anxious endeavour of your Committee to lower this sorrowful rate by securing maternity hospital accommodation for complicated cases, or for mothers from remotely-situated or unsuitable homes. In March, 1924, the Maternity block at the County Hospital, Kendal, was opened. Here 155 mothers have been confined, 65 in 1925. There is also in Kendal a Maternity Home for unmarried mothers, which is a voluntary organisation, administered by the Carlisle Diocesan Rescue and Preventive Association. Other methods approved by your Committee include the encouragement of additional Nursing Associations by annual payments, so as to provide trained maternity nursing all over the County, arrangements for ante-natal supervision, inspection of midwives by Dr. Dorothy Potts, payment of fees for nurses taking "refresher" courses in obstetrics and maternity nursing, and the attendance at conferences on this subject and at post-graduate classes by Dr. Potts and myself. Your Committee has carried out the suggestions embodied in the Ministry's Circular 517 (Maternal Mortality), and will not rest until this heavy mortality has been banished from Westmorland's green and pleasant land.

MIDWIVES ACTS, 1902 & 1918.

Dr. Dorothy Potts, who acts as Inspector of Midwives, furnishes the following report for 1925 :—

Twenty-eight Midwives notified their intention to practise in the County of Westmorland in 1925. Four only of these were bona-fide Midwives, and of these 4 only 2 actually practised. One notified in case of emergency, and the other non-practising bona-fide Midwife was too old and feeble to do any work at all.

Of the 24 qualified Midwives who notified their intention to practise, 14 worked in the County for the full 12 months, the rest being in the County for periods ranging from 6 weeks to 6 months. Twelve of these 24 qualified Midwives were little more than emergency Midwives, acting chiefly as Maternity Nurses with the Doctor.

Thirty-four routine visits were paid. There were no special visits.

NOTIFIABLE DISEASES.

The following Table compares the 1925 incidence of notified diseases with the average for the period 1921-1925 :—

DISEASE.			Total Cases Notified in 1925.	Average Notified 1921—1925.
Small-pox	..	..	Nil.	Nil.
Diphtheria	..	..	5	22
Scarlet Fever	..	..	213	154
Enteric Fever	..	..	10	4
Erysipelas	..	..	13	12
Pulmonary Tuberculosis	..	..	75	81
Other Forms of Tuberculosis	..	..	11	17
Pneumonia	..	..	117	109
Encephalitis Lethargica	..	..	4	4
Poliomyelitis	..	..	0	5
Cerebro Spinal Meningitis	..	..	4	1
Puerperal Fever	..	..	3	2
Ophthalmia Neonatorum	..	..	3	1
Malaria	..	..	0	1

It will be observed that there was an abnormally high incidence of Scarlet Fever in 1925, the districts chiefly affected being East Westmorland, Kendal, and South Westmorland.

So far Westmorland has escaped from Smallpox which has been prevalent in neighbouring Counties. A very close eye has been kept on children notified by school teachers as suffering from Chickenpox, and parents have been advised to have their infants vaccinated, and their older children and themselves re-vaccinated.

In 1925 no cases of Poliomyelitis (Infantile Paralysis) were notified. This County has suffered severely from this terrible disease from 1911 onwards.

TUBERCULOSIS.

The following is a statistical statement covering the period 1921-1925 :—

Notification of Tuberculosis :—

	1925.	1924.	1923.	1922.	1921.
Pulmonary Tuberculosis ...	75	73	77	67	113
Other forms ...	11	21	22	19	12

Deaths from Tuberculosis :—

Pulmonary Tuberculosis ...	42	37	24	37	35
Other forms ...	7	10	14	8	10
Patients admitted to Sanatorium	67	73	65	59	76

Of the 340 patients admitted during 1921-25, 209 were discharged with the disease arrested or quiescent, of whom 107 were fit for work and 56 fit for school. During the above period 32 of the 340 patients died. Of the 340 patients 78 were children.

Dispensary and After-care Work :—

Year.	New Cases Examined.	Total Examinations made.	Domiciliary Visits by Tuberculosis Officer.	Visits by Nurses.
1921	129	365	149	2,814
1922	114	471	101	2,886
1923	112	586	102	2,234
1924	68	528	98	2,721
1925	64	533	93	2,673

Report by the Tuberculosis Officer,

C. FERGUSON WALKER, B.A., M.D., B.S., D.P.H.,
The Year 1925.

WESTMORLAND TUBERCULOSIS SCHEME.

As County Tuberculosis Officer it gives me pleasure to acknowledge the friendly co-operation of the private doctors throughout the County, which has been of the greatest assistance in referring early cases for diagnosis and treatment, and also in regard to after-care. Patients are examined at their homes or at the consulting room of the medical attendant, or at the weekly dispensary clinic in Kendal. In many cases repeated examinations are made and a continuous record of temperature charted before a diagnosis is arrived at; X-ray examination, at the County Hospital or at Meathop, has been of assistance in difficult cases.

Sputum outfits for sending specimens for examination are supplied to the doctors by the County Health Officer, and no charge is made for examination or report. When reporting the result of the examination to the medical attendant, I always write him, offering to examine the patient, with a view to sanatorium treat-

ment or otherwise, and in this way one gets in touch with new cases while still in an early and curable stage.

During 1925 the number of specimens sent by the County doctors to Meathop under this arrangement was 104, of which 40 proved to be positive, and 64 negative for T.B. Of the patients whose sputum was so examined, no fewer than 27 were subsequently recommended for, and persuaded to avail themselves of sanatorium treatment.

The number of Westmorland patients recommended for sanatorium treatment during 1925 was 67, who were all treated at Meathop with exception of three, who were sent to Blencathra Sanatorium in Cumberland.

Two necessitous cases were granted domiciliary treatment with special nourishment for limited periods.

The following are the statistics of Sanatorium treatment of Westmorland patients :

Discharged during 1925	...	...	...	54
Died	..	..	...	12
Stage of disease on admission :—				
Observation cases	...	...	...	2
Pulmonary T.B. (early)	...	...	...	25
.. .. (intermediate)	...	...	...	24
.. .. (advanced)	...	...	...	12
Non-Pulmonary	...	...	...	3

Tubercle Bacilli were found in 23 cases, of which 19 were positive on discharge.

Conditions on Discharge.

<i>Quiescent.</i>	<i>Not quiescent.</i>	<i>Fit for work.</i>	<i>Fit for School.</i>
38	16	23	9

The following are the figures for the dispensary work during 1925 :—

Attendances of Tuberculosis Officer	...	...	50
New cases examined	...	...	64
Total Patients examined	...	...	162
Total examinations made	...	...	533
Total nurses visits	...	...	1562

After-Care.

When a patient is discharged from the Sanatorium a medical report is sent to the Administrative Officer, and the Health Visitor is notified to put the case on her visiting list, so that the patient may receive advice and guidance in regard to home treatment.

I also write to the patient's private medical attendant, giving full medical details regarding his progress, present condition, and any further treatment which may be desirable. Further consultations are arranged as requisite between the medical attendant and the Tuberculosis Officer, who, if desirable, re-visits the patient, to advise as to home treatment, or further sanatorium treatment. The number of such visits paid during 1925 were 93.

The 11 shelters provided for home treatment have all been continuously occupied by suitable cases throughout the year. They are located as follows :—Kendal (2); Bampton, Endmoor, Grasmere, Great Asby, Levens, Milnthorpe, Storth, Winton, Windermere, 1 each.

Dispensary Changes.

Sister Kneale having resigned the post of Kendal Health Visitor and Dispensary Nurse, after 12 years meritorious service, her place was filled by the appointment of Nurse Hutt, who combines the duties of the above appointment with those of District Nurse for Levens. About the same time new and better quarters were found for the Dispensary in Felside Sunday Schools, in a situation both quiet and central. Thanks to the personal interest of the Chairman of the Public Health Committee, Mr. F. W. Crewdson, the necessary alterations were very well thought out, and have resulted in a set of rooms in every way better adapted to the purpose than the old premises, where traffic noises had of late become a serious drawback.

C. FERGUSON WALKER,
County Tuberculosis Officer for Westmorland.

WATER SUPPLIES.

The Medical Officer of Health for the Westmorland Combined Districts (7 urban and 3 rural) deals fully with this subject in his survey reports for 1925.

Here follows a brief summary of his comments on the water supply in the various districts :—

AMBLESIDE.

“ The supply is from Scandale Beck, which rises on Scandale Fell near Red Screes; it is abundant, constant, and exceptionally pure.

APPLEBY.

From Bank Wood, at the foot of Roman Fell, the water is abundant, of excellent quality and free from contamination.

GRASMERE.

A few of the larger residences on the outskirts of the district have their own supply, which is in all cases good. All the rest have the Council's supply from Tongue Ghyll, 2 miles distant; this is of excellent quality, abundant and constant. It is soft, not liable to pollution, and not plumbo-solvent.

KENDAL.

The water, which is soft, but not plumbo-solvent, is provided from the Corporation's own reservoirs at Fisher Tarn and Birds Park. Samples are examined bacterologically each month by the Medical Officer of Health. There are only 30 houses in the Borough which do not obtain their water supply from the public supply, but from wells or small private reservoirs.

KIRKBY LONSDALE.

The supply is constant. The sufficiency and quality of the water are excellent. The reservoir is situated about two miles away, and the liability to contamination is small.

A Ministry of Health enquiry was held during 1925 on an application to borrow money for the improvement of the water supply to the upper parts of the town. This was sanctioned, and the work has been carried out.

SHAP.

The main supply is derived from a stream at the south end of the village. It is hard water, derived from limestone, and is abundant in quality, and the greater bulk is delivered by gravitation and a smaller quantity by means of a ram. The supply is constant, but the intake being below a farm renders it liable to pollution. A small auxillary supply from the north end is obtained from land lying to the north-east. Alternative methods for an improved supply have been considered, but the cost of such has been prohibitive.

WINDERMERE.

The water, which is derived from Dubbs Reservoir, is sufficient in quantity and good in quality; it is not liable to pollution and, whilst soft, is not plumbo-solvent. The supply is constant.

EAST WESTMORLAND RURAL DISTRICT.

In the following parishes the water is supplied direct to the houses, the supply is constant, abundant, and not liable to pollution:—Brough, Brough Sowerby and part of Hilbeck; Kirkby Thore, Temple Sowerby and Newbiggin; Longmarton and Crackenthorpe; Milburn; Ormside; Tebay, Warcop and Sandford; Bleatarn; Mürton; Hilton; Dufton; Orton.

As regards the supply to Kirkby Stephen, the Medical Officer of Health reports that this supply is on the intermittent system. There are 446 houses supplied direct and none from standpipes. The water is derived from a spring at Cold Keld and is supplied direct from the collecting chamber. This supply is polluted by surface water carrying peaty matter. Owing to complaints of shortage and discolouration the question of an improved supply has been referred to engineers, who have submitted a scheme which has been sanctioned by the Ministry of Health. The scheme provides for the tracing of the spring and eliminating the surface water, for the construction of a proper intake tank, repairing leaks, scraping mains, and the extension of the main to a balancing tank.

Ravenstonedale village, Hartley and Newbiggin-on-Lune have piped supplies which are satisfactory. These are in the hands of private owners. The villages of Asby, Colby, Crosby Garrett, Hoff, Burrells, Kaber, Musgrave, Soulby, Waitby and Nateby are chiefly served by springs, wells and pumps, and these supplies cannot be called satisfactory. In a number of cases the water has to be carried an unreasonable distance. Schemes have been prepared at various times and have been abandoned.

SOUTH WESTMORLAND RURAL DISTRICT.

Generally the supply is sufficient and of good quality except in certain areas and owing to exceptional conditions.

Thirteen parishes are now supplied from the Lupton Reservoir. Works of new reservoir construction, new enlarged pipe lines, and balancing tanks are now in course of construction, and owing to the connection of parishes not previously included in the Scheme, and to a number of newly-erected houses being connected there is, until the works in hand are completed, the greatest difficulty in maintaining a constant supply to the houses situated at the highest levels. The water is of good quality, soft and with no plumbo-solvent action.

Burton Parish obtains its supply from the Thirlmere Main.

Barbon Parish has a good and constant supply of water.

Casterton Parish.—Part of the Parish has a good and constant supply; the other portion has a piped supply from a reservoir, the source of the supply being liable to pollution by cattle. The Council has a Scheme under consideration.

Natland Parish.—From Thirlmere Main and from a reservoir. The supply is constant and of good quality.

The villages of Elterwater and Chapel Stile in Langdale have a piped supply of constant water of good quality.

Burneside Village.—A private piped supply from Potter Fell, constant and of good quality.

Staveley and Neighbourhood.—The inhabitants in this area are mainly dependent on shallow wells, and the Council is negotiating with the owner of a good and constant supply, and as soon as this water can be bought the Council will proceed to apply for a loan to construct a reservoir and pipe lines.

Sedgwick.—The inhabitants of this village obtain their supply from a public pump, the water of which is not of good quality, and the Council is considering the question of extending the Lupton reservoir main to this village.

Stainton Village.—Some of the inhabitants of this village obtain their supply from a brook which is liable to pollution. It was proposed to extend the Lupton reservoir main to this village but owing to the great cost for the small number of houses the matter was left in abeyance.

Apart from the villages before mentioned the area in the district which experiences a shortage of water in a dry period is the one extending through Lyth Valley, where the limestone springs soon dry. In all other parts the sufficiency and quality is good, except in odd cases of isolated houses where the cost of providing a supply except by roof water tanks is practically prohibitive.

WEST WARD RURAL DISTRICT.

The water supplies serving the district are as yet unaltered, the sources of public supplies remaining the same as in past years. The one public supply provided by the Council is that serving Barton and district, viz., the parishes of Barton, Sockbridge, Yanwath and Eamont Bridge. The supply from moorland sources is good in quality and quantity and is on the constant system. It would, however, be necessary to augment this supply if its extension to any larger area were desired. The remainder of the district lying to the west—viz., the parishes of Martindale and Patterdale—have sufficient and good water in close proximity

to the consumers, but improvements are needed in these supplies to make them more readily available. Elsewhere in the district, and particularly on the eastern side, supplies are indifferent, wells and numerous inadequate and questionable sources having to serve many of the parishes. About 75% of the houses served by the Barton and district scheme have direct supplies, and the remainder consist of groups of small cottages. For many years the scheme to draw one large and sufficient supply from Haweswater Lake has been delayed, but it is hoped that the year just opened may see the project materialised. The water supplies to three adjoining farms have been analysed and contamination traced to land drainage and deposit in pipes. The water from a public well supplying a good portion of Morland Village has, through the generous action of F. Markham, Esq., been lifted by ram to a convenient position by the roadside, and can be drawn off by tap without the labour of travelling the distant and difficult road to the well. Another public well at Great Strickland has received special attention during the year, and after considerable investigation the pollution by surface water has been practically remedied."

It will be observed that in the majority of districts the water supplies are satisfactory in quality and quantity; at the same time there are several areas where the supply is deficient in quantity and not free from liability to pollution.

The West Ward Rural District Council had a Scheme fully planned and surveyed for supplying 17 villages with water from Blea Tarn in upper Mardale. Then came the Corporation of Manchester and took over Haweswater with Blea Tarn in its catchment area. At great cost the County Council of Westmorland, in loyal defence of the needs of its own people, and in support of the West Ward Council's scheme, opposed the Manchester Corporation's Bill when the right of supply from Haweswater for these villages had to be conceded by the promoters of the Bill.

No Corporation, however thirsty, powerful and wealthy, should have the power to commandeer water supplies with the result that the local authorities have to fight a costly legal battle in the House of Lords.

The whole question should be placed on a National basis with a National Tribunal sitting to envisage the whole picture to whom all local authorities, however diminutive, have free access.

HOUSING.

In the following table will be found a brief statistical statement of the position in the years under review.

Housing 1921—25.

DISTRICT.	Total Dwelling Houses.	Total Working Class Dwellings.	New Working Class Dwellings erected.	Estimated shortage of Houses in 1921.
URBAN.				
Ambleside ..	611	390	6	—
Appleby	451	345	6	12
Grasmere	216	139	12	—
Kendal	3,374	2,290	133	305
Kirkby Lonsdale ..	350	175	1	8
Shap	253	220	11	16
Windermere	1,280	652	44	60
RURAL.				
East Westmorland	2,842	2542	36	93
South „	4,260	2492	131	172
West Ward	1,585	750	14	42

The above figures show that some progress, notably in South Westmorland, Kendal and Windermere, has been made to meet the universal need for additional and improved housing accommodation. In addition to the works carried out by the Corporation of Kendal, there has recently been formed, as the result of the public-spirited action of several Kendal residents, the Kendal and District Housing Society, Ltd., with Lord Henry Cavendish Bentinck as Chairman. An appeal for funds was made, and in a surprisingly short time over £18,000 were raised, of which £745 were gifted, £1,983 taken in shares, and £15,650 in loan stock at 3 per cent. The Committee hope to raise sufficient funds to admit of 100 houses being erected. Meantime they have got

going with a scheme for 48 houses. With the hearty approval of the Corporation of Kendal, who has granted a subsidy of £75 per house, which, with a like sum from the Government, makes in all £150 per house, a start has been made in the erection of 48 houses at Two Stiles Field, Kendal. The floor area of each house is 757 square feet. There are on the ground floor a living-room, larder, scullery, bathroom and conveniences with no outhouses. On the first floor are three airy bedrooms and an airing room. Each house will have a garden front and back, while a large open space is available for allotments. In the construction of these houses the principle of labour-saving has been cleverly achieved, while in the lay-out the all important point of orientation has been kept in view.

In the rural districts shortage of working-class housing accommodation not only accentuates the evils of overcrowding, it entails long tramps to and from work on the part of the wage-earners.

In some areas this shortage is increased by the week-end cottage habit indulged in by well-to-do people from the cities who purchase or rent cottages originally built for working-class folk. These cottages (sometimes two are knocked into one) are not occupied by any means all the year round. The Medical Officer of the Westmorland Combined Districts also comments on this cause of housing shortage.

SALE OF FOOD AND DRUGS ACTS.

COUNTY OF WESTMORLAND.

I am indebted to the Chief Constable of the County for the following summary showing the number of samples, etc., purchased and submitted for analysis during the year 1925:—

Description of Sample	No of Samples Submitted for Analysis	* Certified Genuine.	* Number Adulterated.	" Appeals to Cow."	Persons Summoned & Result.
<u>APPLEBY DIVISION :</u>					
New Milk ...	28	17	7	3	2 dismissed. 3 cautioned. 2 no action.
Baking Powder ...	1	1			
Cocoa ...	2	2			
Coffee ...	3	3			
Condensed Milk ...	3	3			
Sponge Cake ...	2	2			
<i>Informal Samples :</i>					
Jam (Black Currant)	1	1			
Lime Juice & Soda...	1	1			
Meat Paste ...	1	1			
Total for Division ...	42	31	7	3	2 dismissed. 3 cautioned. 2 no action.
<u>KENDAL DIVISION :</u>					
New Milk ...	26	20	4	2	1 dismissed. 3 cautioned.
Carbonate of Soda ...	1	1			
Cinnamon ...	2	2			
Cocoa ...	1	1			
Coffee ...	3	3			
Custard Powder ...	1	1			
Flour ...	1	1			
Fresh Butter ...	2	2			
Ground Almonds ...	1	1			
Lard ...	1	1			
Oatmeal ...	1	1			
Preserved Cream ...	1	1			
Sugar ...	1	1			
<i>Informal Samples :</i>					
Chicken & Ham P'ste	1	1			
Jam (Damson) ...	1	1			
Lemonade ...	1	1			
Total for Division ...	45	39	4	2	1 dismissed. 3 cautioned.
Total for County ...	87	70	11	5	3 dismissed. 6 cautioned. 2 no action.

*These columns refer to ORIGINAL SAMPLES ONLY, and are exclusive of 5 appeal samples and 1 sample taken in transit.

PUBLIC HEALTH (MILK & CREAM) REGULATIONS, 1912.

The following is a Special Report submitted to your Committee in January, 1926:—

REPORT by the County Medical Officer of Health on the administration of the above-mentioned Regulations during the year ended 31st December, 1925.

To the Public Health Committee of the County of Westmorland.
Gentlemen,

I have the honour to report as follows:—

1. **SAMPLING OFFICERS.**

(a) In the County, excluding the Borough of Kendal.

The County Police in the Appleby Police Division and in the Kendal Police Division takes samples of milk and cream for analysis by the County Analyst, Mr. C. J. H. Stock, B.Sc., F.I.C., of Carlisle.

During the year 1925, 54 samples of milk and one sample of preserved cream were taken. On analysis no sample of milk was found to contain preservatives and no sample of cream was found to contain preservatives in excess of the limit permitted by the above-named Regulations.

(b) In the Borough of Kendal.

The Borough Sanitary Inspector takes samples for analysis by the Borough Analyst, Mr. W. H. Roberts, M.Sc., F.I.C., of Liverpool.

During 1924, 24 samples of milk were taken in Kendal. On analysis all these samples were found free from preservatives.

2. **PRESERVATIVES IN CREAM.**

The bulk of the cream consumed in the County, including the Borough of Kendal, is fresh cream direct from the farm, to which no preservatives are added.

During the tourist season, and especially during the strawberry season a certain amount of preserved cream is purchased in Grasmere, Ambleside, Windermere and Bowness. The Police report that the regulations as to declaration of added preservatives in respect of preserved cream have been observed.

3. **PRECAUTIONS TAKEN.**

In 1922 the Medical Officer of Health of the Westmorland Combined Districts found that a proprietary preparation was being advertised in the local Press as a milk preservative. A sample was analysed and found to contain 3.1 per cent. of Formaldehyde and 96.9 per cent. of water. The attention of the Manufacturer of this preparation was drawn to the Public Health (Milk and Cream) Regulations when the article was withdrawn from sale. The

matter was reported to the Ministry of Health at the time. Since then no similar preparation has been on sale.

I have the honour to remain,

Your obedient Servant,

Lowther House, Kendal.

WILLIAM ELMSLIE HENDERSON.

January, 1926.

PUBLIC HEALTH (VENEREAL DISEASES) REGULATIONS, 1916.

Twenty Westmorland patients have been treated at the Clinics at Barrow-in-Furness, Carlisle, Leeds, and South Shields in 1925.

In necessitous cases the railway fare was paid by the County Council in terms of the County Scheme.

Outfits for the taking and dispatch of specimens are supplied free of cost to doctors. These specimens are examined and reported on at the Department of Pathology, Manchester University.

During 1925, 18 blood specimens were examined at the above Department for Wassermann reaction, of which 5 were found positive and 13 negative. In addition one specimen for gonococcus was examined at the Westmorland Combined Districts' Laboratory in Kendal.

All patients before admission to the St. Monica's Maternity Home are tested by the Wassermann test, and those showing a positive reaction are admitted to the Hope Hospital, Leeds. In 1925 2 patients were admitted to this Hospital where they had concurrent treatment and maternity care, with restoration to health of the mothers and healthy babies.

During the period 1921-1925, 60 Westmorland patients have been under treatment for venereal disease, and 123 blood specimens have been examined, 33 proving positive, and 90 negative.

BACTERIOLOGICAL INVESTIGATIONS.

The Medical Officer of Health for the Westmorland Combined Districts kindly furnishes the following report on the bacteriological and analytical work carried out by him in his Laboratory, which is maintained by the Combined Districts. As is evident from this Table much valuable work has been done to the great and prompt convenience of the practising doctors, for results reach them with as little delay as possible.

Blood Specimens for the Wassermann test are dealt with at the Pathological Department, University of Manchester, in terms of the County Scheme under the Public Health (Venereal Diseases) Regulations, 1916. In addition to the 49 specimens of sputum examined at the above Laboratory, 104 specimens were examined at the Laboratory of the Westmorland Sanatorium, Meathop, Grange-over-Sands (see page 19).

LABORATORY REPORT, 1925.

DISTRICT.	BACTERIOLOGICAL.										PHYSICAL & CHEMICAL.						TOTALS.			
	Diphtheria.	Organisms.	Tubercle (Sputum).	Enteric Fever.		Bacilluria.	Vaccine Cultures.	Water (B Coll).	Milk.		Malaria.	Gonococcus.	Urine.			Anæmia (Blood).		Actinomycosis.	Intestinal Parasites.	Water Analysis.
				Agglutinations.	Carriers.				Bacterial Counts.	B. Coll.			Scarlet Fever.	Deposits.	Albuminuria.					
Ambleside	2	1	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
Appleby	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Grasmere	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5
Kendal	63	60	29	18	16	5	2	36	1	1	4	-	22	1	14	2	-	1	-	275
Kirkby Lonsdale	13	20	-	-	-	-	-	1	-	-	-	-	2	-	-	-	-	-	1	37
Shap ...	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Windermere	13	2	2	-	-	-	-	-	-	-	-	-	6	-	-	-	-	-	-	23
East Westmorland	3	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-	5	-	13
South Westmorland	51	42	18	6	-	3	4	11	3	3	2	1	8	2	-	5	1	-	6	116
West Ward ...	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	4	-	5
TOTALS	153	125	49	27	16	9	6	53	4	4	6	1	138	3	14	7	1	1	16	533

EDUCATION IN HEALTHY LIVING.

To this task Public Health Authorities have been given a very clear call by the Chief Medical Officer of the Ministry of Health.*

This work has always been a feature of your Committee's health scheme. During 1925 instruction in the art of healthy living has been extended to every corner of the County, thanks, in large measure, to the widespread activities of the County Federation of Women's Institutes and kindred organisations. On their invitation many lectures—most of them at evening meetings—have been given by Dr. Potts and myself. Last winter one of the subjects considered was "Food and Your Money's Worth"—the point being that the fashionable, high-priced, cuts are not necessarily highest in food-value, and that the much advertised, and therefore relatively high-priced, packet preparations of cereals are lower in food value than the ordinary home-grown cereals, for one thing they lack the all-important element of freshness, for who knows when they were harvested.

Further an attempt is made to interest the public as much in the splendours of health as in the horrors of disease. The restoration to health by the service of Curative Medicine and Surgery at once appeals to our interest and sympathy, yet this is not the whole picture. There is as well the maintenance of health as a personal responsibility, nothing less than what has been called "the august and precarious stewardship of the clean blood of a race."

Your Committee has encouraged and supported this work, realising that your concern is not only to control the forces that make for disease and disablement, but to liberate the forces that make for health.

"The maintenance of health and powers of resistance of the average person lies at the basis of national well-being," writes Sir George Newman.† "The purpose of Preventive Medicine is not only the reduction of disease or the postponement of the event of death, but the strengthening of the health and the raising of the standard of physical capacity of the normal person. This can never be achieved by Act of Parliament or official regulation, but only by each individual safeguarding his own physique and fortifying his own powers of resistance, and in order to do this he requires counsel and advice, and to be reminded of his obligations both to himself and to others."

Looking back over the last five years, we can say with truth that the extension throughout this County of the Women's Institute Movement, with its spirit of cheery sisterhood, its willingness to learn, its grace of mental hospitality, and its wide outlook, has

been a powerful and pervading influence on the side of health, and the habit of healthy living.

Looking forward into the next five years, we, as an Authority charged with the duty of safeguarding and enriching the health of the people, must continue our efforts to reduce the maternal and infantile mortality; to cleanse the milk supply; to wipe out the housing shortage, and by spreading the story of healthy living as a personal responsibility to help the normal individual citizen to raise his or her standard of health so as to resist disease and prevent disablement.

*An Outline of the Practice of Preventive Medicine, Cmd. 363, 1919.
Public Opinion in Preventive Medicine, 1920. H.M. Stationery Office, price 4d.

†Public Education in Health, 1924. H.M. Stationery Office, price 6d.

